

## INTERNATIONAL SEARCH REPORT

Application No

JL2004/000713

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 D01H1/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 D01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 085 045 A (TAKEUCHI YUKIO ET AL) 4 February 1992 (1992-02-04)	1-7, 13, 14, 18-22, 26-28, 33-35, 37, 38
Y		8-12, 15-17, 36
A	column 4, line 36 - column 6, line 64; figures 1-8	23-25, 29-32
Y	DE 31 50 610 A (STUTTGARTER SPINDELFABRIK NOVI) 30 June 1983 (1983-06-30) page 14, paragraph 3 - page 15, paragraph 1; figure 11	8-12, 15-17
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

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\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

21 January 2005

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28/01/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 045 053 A (MURATA MACHINERY LTD) 18 October 2000 (2000-10-18) page 5, paragraph 36 - paragraph 40; figure 1	36
X	DE 12 25 083 B (DEERING MILLIKEN RES CORP) 15 September 1966 (1966-09-15)	1,18-26
A	column 4, line 1 - column 5, line 39; figures 1-8	2-19, 27-38
X	GB 692 027 A (HOWE TWISTER CORP) 27 May 1953 (1953-05-27) page 6, line 5 - page 9, line 96; figures 1-14	1
X	US 3 377 790 A (GERHARD BROCKEL) 16 April 1968 (1968-04-16) the whole document	1

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Application No  
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5085045	A	04-02-1992	FR 2663048 A1 DE 4018124 A1	13-12-1991 12-12-1991
DE 3150610	A	30-06-1983	DE 3150610 A1	30-06-1983
EP 1045053	A	18-10-2000	JP 3387444 B2 JP 2000290841 A JP 2000290842 A JP 2000290843 A CN 1269433 A EP 1045053 A1	17-03-2003 17-10-2000 17-10-2000 17-10-2000 11-10-2000 18-10-2000
DE 1225083	B	15-09-1966	NONE	
GB 692027	A	27-05-1953	NONE	
US 3377790	A	16-04-1968	CH 427593 A GB 1124048 A	31-12-1966 21-08-1968